

T.Y. I - T. Sem - VI A.T.K-T.
Data warehousing
2016-17

QP Code : 78177

(2½ hours)

Total Marks: 75

- N. B.: (1) All questions are compulsory.
(2) Make suitable assumptions wherever necessary and state the assumptions made.
(3) Answers to the same question must be written together.
(4) Numbers to the right indicate marks.
(5) Draw neat labelled diagrams wherever necessary.
(6) Use of Non-programmable calculators is allowed.

1. Attempt any two of the following: 10
 - a. Explain star schema model with example.
 - b. What is source system? Briefly explain various layers in data warehouse architecture.
 - c. Explain functional dependency of the data with example.
 - d. Describe various strategies by which organizations can get into data warehousing.
2. Attempt any two of the following: 10
 - a. Enumerate and explain the steps to import metadata from oracle data source.
 - b. List major components of Oracle Warehouse Builder. Also describe its architecture.
 - c. Describe the importance of OWBSYS schema.
 - d. What are data objects? Explain various functions of data object editor.
3. Attempt any two of the following: 10
 - a. Explain about cube and dimensions with examples.
 - b. What are the various windows available in data object editor? Briefly explain any two of them.
 - c. Explain the steps to create a dimension using dimension wizard.
 - d. Define what is slowly changing dimension. Explain type2 and type3 slowly changing dimensions with an example of each.
4. Attempt any two of the following: 10
 - a. Explain staging and its advantages and disadvantages.
 - b. Explain key lookup operator with example.
 - c. Explain the pre/post-processing operators.
 - d. What are the attribute groups present in joiner operator? Explain the steps to connect source tables to target using joiner operator.
5. Attempt any two of the following: 10
 - a. Which attributes are used in a cube to represent its dimensions? Also discuss the naming conventions used for these attributes.
 - b. What is the role of transformation operator in a mapping? Describe SUBSTR transformation function.
 - c. What are external tables? Explain the steps to create an external table.
 - d. Write short notes on object validation and code generation.
6. Attempt any two of the following: 10
 - a. Explain data density and data sparsity in multidimensional cube with example.
 - b. Briefly explain various metadata change management features in OWB.
 - c. Discuss Multidimensional Online Analytical Processing.
 - d. Explain the directions and matching strategies to synchronize a mapping operator with its repository operator.
7. Attempt any three of the following: 15
 - a. Briefly explain granularity and additivity of facts.
 - b. What is a Listener? Explain concisely the steps to configure a Listener.
 - c. Explain surrogate keys with an illustrative example.
 - d. Define data flow operators. Explain the role of aggregators and filters in ETL mapping.
 - e. Explain the steps to define constant values through Constant operator.
 - f. Explain Real-Time Analytical Processing.